

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

10/711,086 08/20/2004 Joe D. Dunlap JR.	RAP04 P-658A	
•	KAF04 F-036A	5085
28101 7590 01/24/2006	EXAMINER	
VAN DYKE, GARDNER, LINN AND BURKHART, LLP	TWEEL JR, JOHN ALEXANDER	
2851 CHARLEVOIX DRIVE, S.E. P.O. BOX 888695	ART UNIT	PAPER NUMBER
GRAND RAPIDS, MI 49588-8695	2636	

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/711,086	DUNLAP, JOE D.		
Office Action Summary	Examiner	Art Unit	<u>. </u>	
	John A. Tweel, Jr.	2636		
The MAILING DATE of this communication app	ears on the cover sheet w	vith the correspondence address -		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period we failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUN 6(a). In no event, however, may a ill apply and will expire SIX (6) MO cause the application to become A	ICATION. reply be timely filed NTHS from the mailing date of this communicated BANDONED (35 U.S.C. § 133).		
Status				
1) Responsive to communication(s) filed on 20 Au	iaust 2004.			
	This action is non-final.			
,—	or allowance except for formal matters, prosecution as to the merits is			
closed in accordance with the practice under E				
Disposition of Claims				
4)⊠ Claim(s) <u>1-14</u> is/are pending in the application.				
4a) Of the above claim(s) is/are withdraw	n from consideration.			
5) Claim(s) is/are allowed.				
6)⊠ Claim(s) <u>1-4,6 and 8-10</u> is/are rejected.				
7)⊠ Claim(s) <u>5,7 and 11-14</u> is/are objected to.				
8) Claim(s) are subject to restriction and/or	election requirement.			
Application Papers				
9) The specification is objected to by the Examiner	<u>.</u>			
10)⊠ The drawing(s) filed on <u>20 August 2004</u> is/are: a)□ accepted or b)⊠ objected to by the Examiner.				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correction	on is required if the drawing	g(s) is objected to. See 37 CFR 1.12	.1(d).	
11) The oath or declaration is objected to by the Exa	aminer. Note the attache	d Office Action or form PTO-152		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C.	§ 119(a)-(d) or (f).		
a)☐ All b)☐ Some * c)☐ None of:				
1. Certified copies of the priority documents have been received.				
2. Certified copies of the priority documents				
3. Copies of the certified copies of the priori	•	received in this National Stage		
application from the International Bureau		t roopiyad		
* See the attached detailed Office action for a list of	or the certified copies no	. received.		
Attachment(s)				
1) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413)		
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	(s)/Mail Date Informal Patent Application (PTO-152)		
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	6) Other:	• • • • • • • • • • • • • • • • • • • •		

Application/Control Number: 10/711,086 Page 2

Art Unit: 2636

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 24, 30°. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2636

3. Claims 1-4, 6, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Garber et al [U.S. 6,232,870].

For claim 1, the material support system for supporting items having RFID tags taught by **Garber** includes the following claimed subject matter, as noted, 1) the claimed at least one item support is met by the shelves seen in Figure 13 adapted to support a horizontal row of books, 2) the claimed RF antenna is met by the hand-held RFID device also seen in Figure 13 that contains an RFID reader, user interface, power source, antenna, processor, and software positioned adjacent the shelf, said device also 3) meeting the transport system, as the device can be transported along a horizontal row of books at the shelf.

For claim 2, Figure 13 of Garber shows a plurality of shelves adapted to support multiple horizontal rows of books and the RFID device can be transported along the multiple rows of items at the shelves.

For claim 3, the Garber reference mentions containing multiple RFID interrogation sources (readers) mounted in the device in order to rapidly process multiple items (Col. 13, Lns. 27-33).

For claim 4, the hand-held device of Garber may be transported both horizontally and vertically from one shelf to another.

For claim 6, the RFID device of Garber is adapted to be held in a space or "void" next to the shelf.

For claim 8, the system of Garber is designed for a retail system wherein items on shelves each have an RFID tag.

Art Unit: 2636

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Garber** in view of **Brady et al** [U.S. 6,166,638].

For claim 9, the system of **Garber** includes the claimed subject matter as discussed in the rejection of claim 1 above. However, there is no mention of a warehouse material-handling system wherein the supports comprise a row of container supports adapted to support multiple-item containers.

The RFID transponder taught by **Brady** teaches a transponder having a particular dipole antenna and RF modulator. One application is in a warehouse having cargo containers or pallets as seen in Figures 7 and 8. A hand-held RFID interrogator (No. 82) is even used to check the condition of several transponders (Nos. 74-76). This reference is plain evidence that RFID systems have been in use in warehouses for some time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system of Garber for the tracking and inventory of warehouse items for the purpose of using a common and well known RFID application.

Art Unit: 2636

For claim 10, RFID systems are commonly used for automatic storage and retrieval systems. To use one in this fashion is not considered a patentable innovation, as this is merely one obvious use of RFID systems.

- 6. Claims 5, 7, and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 7. The following is a statement of reasons for the indication of allowable subject matter:

As seen from the rejection above, it is not enough to merely state an antenna is "transported", as this has several different methods and results. However, the specific apparatus or method as to HOW the antenna is transported is considered unobvious, such as the two vertical supports, the monorail system, and the crane having a mast and gripper wherein the antenna is located on the mast or gripper.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Remahl [U.S. 5,260,694] is an article tracking system having a delivery zone transmitter.

Goff et al [U.S. 6,335,686] teaches antenna shelf tape for use with items having RFID tags.

Art Unit: 2636

Collins et al [U.S. 6,392,544] selectively activates RFID tags in close proximity.

Garber et al [U.S. 6,486,780] relates to RFID devices and handheld devices.

Swartzel et al [U.S. 6,552,663] includes a plurality of display tags with expanded functions.

Petrinovic [U.S. 6,927,692] calculates a quantity of items having RF tags.

Sawyer [U.S. 6,933,849] manages physical objects in environments such as police departments, law offices and courts.

Moore [U.S. 6,956,538] tracks passive RFID tags automatically.

Blum et al [U.S. 6,982,649] relates to a floor display system with interactive features.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John A. Tweel, Jr. whose telephone number is 571 272 2969. The examiner can normally be reached on M-F 10-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass can be reached on 571 272 2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/711,086 Page 7

Art Unit: 2636

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAT 1/21/06

PRIMARY EXAMINER